

REMARKS/ARGUMENTS

Claims 1-11 and 13-23 are present in this application. By this Amendment, claims 1, 3, 14, 15 and 23 have been amended, and claim 12 has been canceled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

The drawings were objected to under 37 C.F.R. §1.83(a). Without conceding this objection, claim 12 has been canceled. Withdrawal of the objection is requested.

Claims 3 and 15 were rejected under 35 U.S.C. §112, second paragraph. Claims 3 and 15 have been amended to eliminate reference to the fourth axis being generally parallel to the ground plane. Withdrawal of the rejection is requested.

Claims 1 and 14 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,460,414 to Erickson et al. This rejection is respectfully traversed.

Erickson discloses a device that is used in a laboratory environment to hold silicon wafers to perform acoustic microimaging. Nowhere does Erickson even remotely describe an attachment for a telescopic material handler. In this context, the present application describes a device that is used in a construction environment to hold large objects for installation on a building. In an effort to clarify this distinction, claims 1 and 23 have been amended to recite that the attachment includes “a coupling section coupleable with the telescopic material handler.” Additionally, claim 1 recites that the manipulation assembly supports a gripping system and is “connected to the coupling section.” Support for this amendment can be found in the specification at, for example, paragraph [0028] and the drawings. Since the Erickson patent does not in any manner reference an attachment for a telescopic material handler or include a coupling section that is coupleable with a telescopic material handler, Applicants respectfully submit that the rejection of claim 1 should be withdrawn.

In a similar context, claim 14 has been amended to define a method of manipulating a load via an attachment to a telescopic material handler. The method includes a step of coupling the attachment to the telescopic material handler via a coupling section. As noted, at least this subject matter is lacking in Erickson.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-3, 14 and 15 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 3,630,389 to Schmidt in view of U.S. Patent No. 3,598,263 to Ehmke. This rejection is respectfully traversed.

An important distinction between the claimed invention and the Schmidt patent is that the claimed invention is directed to an attachment for a telescopic material handler, and the Schmidt patent, in contrast, describes a stationary material handling manipulator. As noted above, claim 1 has been amended to define a coupling section coupleable with the telescopic material handler. Additionally, the manipulation assembly that supports the gripping system is connected to the coupling section. Schmidt lacks at least this subject matter.

Still further, the Schmidt structure requires its upper and lower booms, etc. in order to achieve movement with five degrees of freedom. Since the claimed invention relates to an attachment for a telescopic material handler, the attachment is movable in at least five degrees of freedom independent of the telescopic material handler to which it is attached. In this context, claim 1 has been further amended to recite that the manipulation assembly is movable in at least five degrees of freedom independent from additional degrees of freedom provided by movements of the telescopic material handler.

The Ehmke patent does not correct these deficiencies. That is, Ehmke similarly lacks a teaching or suggestion of an attachment for a telescopic material handler. As such, Ehmke lacks

the claimed coupling section coupleable with a telescopic material handler. Ehmke also lacks a manipulation assembly movable in at least five degrees of freedom independent from additional degrees of freedom provided by movements of the vehicle to which the plate glass handling apparatus is attached.

For at least these reasons, Applicants respectfully submit that the rejection is misplaced.

With regard to the dependent claims, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 4 and 12 were rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke and U.S. Patent No. 4,878,798 to Johansson. Without conceding this rejection, the Johansson patent does not correct the deficiencies noted above with regard to Schmidt and Ehmke. As such, Applicants submit that dependent claim 4 is allowable at least by virtue of its dependency on an allowable independent claim.

Claims 5 and 23 were rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke, Johansson and U.S. Patent No. 4,460,208 to Hoffman. This rejection is respectfully traversed.

With regard to claim 5, without conceding this rejection, the Hoffman patent does not correct the deficiencies noted above with regard to Schmidt, Ehmke and Johansson, taken singly or in combination. As such, Applicants submit that this dependent claim is allowable at least by virtue of its dependency on an allowable independent claim.

With regard to independent claim 23, claim 23 has been amended in a manner similar to claim 1, defining a coupling section coupleable with the telescopic material handler, and reciting that the manipulation assembly supporting the gripping system is connected to the coupling section. Additionally, claim 23 recites that the manipulation assembly is movable in at least five

degrees of freedom independent from additional degrees of freedom provided by movements of the telescopic material handler. With reference to the discussion of claim 1 above, Applicants submit that at least this subject matter is lacking in the cited references.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 6 was rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke, Johansson, Hoffman and U.S. Patent No. 5,690,377 to Tanaka. Without conceding this rejection, the Tanaka patent, however, does not correct the deficiencies noted above with regard to Schmidt, Ehmke, Johansson and Hoffman, taken singly or in combination. As such, Applicants submit that this dependent claim is allowable at least by virtue of its dependency on an allowable independent claim. Moreover, Tanaka describes a device that uses sensors to determine the size of the object it is picking up and uses the manifold valve to reduce the number of vacuum cups it is using to pick up the object. In contrast, the structure defined in claim 6 closes the manifold valves to maintain the vacuum pressure in each respective reservoir to hold the object as long as possible. Withdrawal of the rejection is requested.

Claims 7-9 were rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke, Johansson, Hoffman, Tanaka and U.S. Patent No. 6,467,824 to Bolotin et al. Without conceding this rejection, the Bolotin patent does not correct the deficiencies noted above with regard to the cited references, taken singly or in combination. As such, Applicants submit that these dependent claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is requested.

Claim 10 was rejected under 35 U.S.C. §103(a) over the references noted above and further in view of U.S. Patent No. 5,413,454 to Movsesian and U.S. Patent No. 5,142,803 to Lang. Without conceding this rejection, the additional cited references, however, do not correct

the deficiencies noted above with regard to the initial cited references. As such, Applicants submit that this dependent claim is allowable at least by virtue of its dependency on an allowable independent claim. Moreover, in contrast with the Examiner's characterization of the Movsesian patent, Movsesian describes a radio control system that uses a single radio controller and a receiver (12), and not a dual radio controller system as contended in the Office Action. Additionally, Lang describes a radio control system that uses two radio controllers that have simultaneous control of the device. Claim 10, in contrast, recites that control of the load is transferable between the primary and secondary radio transmitters, and as such, the radio control system uses two radio controllers that each have exclusive control of the device and the ability to pass control between them. Withdrawal of the rejection is requested.

Claim 11 was rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke, Johansson and U.S. Patent No. 6,082,080 to Holter. Without conceding this rejection, the Holter patent, however, does not correct the deficiencies noted above with regard to Schmidt, Ehmke and Johansson. As such, Applicants submit that this dependent claim is allowable at least by virtue of its dependency on an allowable independent claim. Withdrawal of the rejection is requested.

Claims 13, 19 and 20 were rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke, Movsesian and Lang. The comments noted above with regard to Movsesian and Lang are equally applicable to claims 13, 19 and 20. Moreover, Applicants submit that these dependent claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is requested.

Claims 16-18 were rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke and Bolotin. Without conceding this rejection, Applicants submit that these dependent claims are allowable at least by virtue of their dependency on an allowable independent claim.

Claims 21 and 22 were rejected under 35 U.S.C. §103(a) over Schmidt in view of Ehmke and Holter. Without conceding this rejection, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is requested.

In view of the foregoing amendments and remarks, Applicants respectfully submits that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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